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EXAMINER

LAYE, JADE O

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/854,334

Applicant(s)

KIKINIS ET AL.

Examiner

Jade O. Laye

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☒ Claim(s) 2-10, 13-21 and 24-34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statements (IDS) submitted on 05/11/01, 06/04/01, 07/19/01, 08/28/01/, and 01/31/02 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements have been considered by the examiner.

Drawings

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 2-10, 13-21, and 24-34 are objected to because of the following informalities:

- a. The word "Claim" should not be capitalized within the body of claims 2-9, 13-20, and 24-34.
- b. Claim 10 recites "...the third set of objects...", which lacks antecedent basis.

- c. Claim 21 recites "...the localized interactive content...", which lacks antecedent basis.
- d. The spacing/format of claim 31 is not uniform.
- e. There is no need to refer to a first unit in claim 1. First unit implies there is a second unit, which there is not. It is recommended applicant negate the first language.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1-30 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clanton, III et al (US #5,745,710) in view of LaJoie et al. (US #5,850,218).

Applicant's claim 1 recites a system comprising:

- a. a unit to generate a 3-D EPG
- b. and, a communication module coupled to a network in order to receive localized content from a separate computer device

Clanton discloses a system capable of generating a 3-D EPG (Fig. 7 & Col. 2, Ln. 43-67 thru Col. 3, Ln. 1-5) and displaying advertisements from local merchants (Col. 12, Ln. 14-17), but fails to disclose whether this local content can be received from a separate computer device. However, within the same field of endeavor, LaJoie discloses an EPG, which provides a full service television system capable of delivering services such as Internet browsing, email, and online services. (Col. 2, Ln. 8-11). It is inherent that LaJoie's system be capable of receiving any content, including localized, from other computer devices located on the World Wide Web network. Therefore, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to combine the 3-D EPG of Clanton with the Internet capability of LaJoie's EPG in order to provide a user with a 3-D EPG capable of accessing local content. *(Note: Since the combination of Clanton and LaJoie form the basis of all rejections contained herein, save*

claim 31, this motivation to combine serves as the motivation to combine for all Clanton/LaJoie rejections)

Claims 12 and 23 are method and apparatus claims, respectively, which correspond to claim 1. Accordingly, they are analyzed and rejected as previously discussed.

Applicant's claim 2 recites the system of claim 1, wherein the system comprises a set-top box, a television, *or* a VCR. As discussed above, Clanton and LaJoie contain all limitations of claim 1 and Clanton further discloses the system comprises a set-top box and a television. (Fig. 1). Accordingly, the combination of Clanton and LaJoie contain all limitations of claim 2.

Claims 14 and 24 are method and apparatus claims, respectively, which correspond to claim 2. Accordingly, they are analyzed and rejected as previously discussed.

Applicant's claim 3 recites the system of claim 1, wherein the system includes a plurality of drivers, one of the drivers communicating with a separate unit to replenish programming information. Applicant has defined driver as a "connector", and the examiner interprets it accordingly. (Spec. Page. 8, Par. [0026]). As discussed above, Clanton and LaJoie contain all limitations of applicant's claim 1, and LaJoie further teaches his system is connected to a plurality of units, which enables it to provide an EPG, web browsing, email, online services, Near Video on Demand, Pay-Per-View, and Video on Demand services. (Col. 2, Ln. 1-11). Moreover, the examiner takes Official Notice that it is well known in this art that an EPG is capable of replenishing programming information. Therefore, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to further modify the combined teachings of Clanton and LaJoie to further include a well-known method of replenishing the EPG system in order to supply the user with current and up-to-date programming information.

Claim 25 is an apparatus claims which corresponds to system claim 3. It is analyzed and rejected as previously discussed.

Applicant's claim 4 recites the system of claim 1, wherein a memory in the system contains a plurality of objects associated with current programming events, a first class of objects providing a plurality of virtual worlds included in the 3-D EPG. As discussed above, Clanton and LaJoie contain all limitations of claim 1 and Clanton further discloses the system contains 3-D objects stored in memory (Col. 7, Ln. 15-18), which correspond to the programming events (Col. 8, Ln. 19-36 & Fig. 4-13). Selecting one of these 3-D objects will cause the system to display additional virtual worlds corresponding to the selected object. (Col. 9, Ln. 13-21). Thus, the combination of Clanton and LaJoie contains all limitations of claim 4.

Method claims 13 and 15 and apparatus claim 26 correspond to system claim 4. Accordingly, they are analyzed and rejected as previously discussed.

Applicant's claim 5 recites the system of claim 4, wherein the memory in the system includes a second set of objects that includes *at least one of* a schedule times, channel identification, *or* title corresponding to a program. (Note: The USPTO considers applicant's "at least one of" language to be anticipated by any reference containing one of the subsequent corresponding elements.) As discussed above, Clanton and LaJoie contain all limitations of claim 4, and Clanton also discloses a 3-D EPG containing the title (Fig. 5) and channel identification (Fig. 10) of a program. Moreover, Clanton incorporates by reference U.S. Patent #4,706,121 to Young, which discloses an EPG containing category, title, date, and the start time of television programs. (Clanton Col. 2, Ln. 4-11). Thus, the combination of Clanton and

LaJoie contain all limitations of claim 5. (In addition, LaJoie Fig. 16 also discloses the above limitations.)

Claims 16 and 27 are method and apparatus claims, respectively, which correspond to the system claim 5. Accordingly, each is analyzed and rejected as previously discussed.

Applicant's claim 6 recites the system of claim 5, wherein the second set of objects includes localized content. As discussed above, Clanton and LaJoie contain all limitations of claim 5, and Clanton further discloses the system can display advertisements from local merchants. (Col. 12, Ln. 1-17). Accordingly, Clanton and LaJoie contain all limitations of applicant's claim 6.

Claims 17 and 32 are method and apparatus claims, respectively, which correspond to the system claim 6. Each is analyzed and rejected as previously discussed.

Applicant's claim 7 recites the system of claim 4, wherein the memory in the system includes a third set of non-EPG objects including objects for e-commerce. Applicant did not provide a clear definition of "non-EPG" objects, therefore the examiner interprets the term to be objects that do not correspond to programming events. As discussed above, Clanton and LaJoie contain all limitations of claim 4 and Clanton further teaches the use of "extras", which advertise for various non-EPG services (pizza delivery, etc.). (Col. 12, Ln. 14-22). Combined with LaJoie's online capabilities discussed above, these "extras" can be used in e-commerce. Therefore, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to further modify the combination of Clanton and LaJoie to also include the non-EPG "extras" teaching of Clanton in order to provide a method by which a user can partake in e-commerce.

Claims 18 and 28 are method and apparatus claims, respectively, corresponding to the system claim 7. Each is analyzed and rejected as previously discussed.

Applicant's claim 8 recites the system of claim 1, wherein the 3-D EPG includes a presentation of a virtual world related to the content selected by a user. As discussed above, Clanton and LaJoie contain all limitations of claim 1 and Clanton further discloses the system displays the interior of 3-D objects, such as the "Critic's Café" of Figure 6, after they have been selected. (Col. 9, Ln. 15-21). Thus, Clanton and LaJoie contain all limitations of claim 8.

Claims 19 and 29 are method and apparatus claims, respectively, which correspond to the system claim 8. Accordingly, they are analyzed and rejected as previously discussed.

Applicant's claim 9 recites the system of claim 8, wherein a subset of the virtual world is displayed as a matrix of rectangular boxes containing current programming information. As discussed above, Clanton and LaJoie contain all limitations of claim 8, and LaJoie further discloses the EPG contains a matrix of rectangular boxes containing current programming. (Fig. 16). Thus, Clanton and LaJoie contain all limitations of applicant's claim 9.

Claims 20 and 30 are method and apparatus claims, respectively, which correspond to the system claim 9. Each is analyzed and rejected as previously discussed.

Applicant's claim 10 recites the system of claim 6, wherein the localized interactive content of the third set of objects is uploaded in real time. As discussed above, LaJoie discloses an EPG with Internet capabilities and Clanton discloses an EPG capable of displaying localized content. Those of ordinary skill in this art recognize it would have been obvious in systems having Internet capability, that they receive streaming data via a server which retrieves the data in real-time. Therefore, further modifications of the combined teachings of Clanton and LaJoie

would result in a system which is capable of uploading localized content in real-time. Accordingly, each limitation of applicant's claim 10 is contained within the combined teachings of Clanton and LaJoie.

Claims 21 and 33 are method and apparatus claims, respectively, which correspond to the system claim 10. Each is analyzed and rejected as previously discussed.

Applicant's claim 11 recites the system of claim 10, which further includes an interface for a user to interact with the localized content of the 3-D EPG. As discussed above, Clanton and LaJoie contain all limitations of applicant's claim 10, and Clanton further discloses a user interface in which the user can select "extras" corresponding to local services available to the user. (Col. 11, Ln. 54-67 through Col. 12, Ln. 1-17). Thus, Clanton and LaJoie contain all limitations of claim 11.

Claims 22 and 34 are method and apparatus claims, respectively, which correspond to the system claim 11. Each is analyzed and rejected as previously discussed.

2. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clanton in view of LaJoie as applied to claim 30 above, and further in view of Kamen et al. (US #6,421,067).

Applicant's claim 31 recites the storage medium of claim 30, wherein a user of the system chooses a virtual world to display programming information. As discussed above, Clanton and LaJoie contain all limitations of claim 30 but fail to disclose a method by which the user is allowed to choose the virtual world that displays the program information. However, in the same field of endeavor, Kamen discloses a 3-D EPG system in which the user, via a remote control, can modify the EPG surfaces. Kamen allows the user to choose lighting, color, texture, or positions of objects within the 3-D space. (Col. 3, Ln. 35-65). Even though the user is not

allowed to choose a completely new virtual world, he is still allowed to choose certain characteristics of the virtual world, which give it a new look and feel. Choosing a different virtual world is only an obvious variant to manipulating the existing virtual world to give it a different look and feel, as in Kamen. Accordingly, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention to combine the teachings of Clanton and LaJoie with the virtual world manipulating capabilities of Kamen in order to provide the user with a method of selecting and personalizing a virtual world of their choosing.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Hoarty (US #5,485,197) discloses a 3D EPG carousel display.
- b. Cooper et al (US Pub. #2004/0231003) discloses a 3D EPG, which is capable of manipulating a virtual world.
- c. Alten et al (US #5,635,978) discloses an EPG which can update sporting reports in real time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jade O. Laye whose telephone number is (703) 308-6107. The examiner can normally be reached on Mon. 7:30am-3pm, Tues.-Fri. 7:30-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner's Initials
December 2, 2004

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NGOC-YEN YU
PRIMARY EXAMINER